# Advantages of Transitioning Away from Ammonia Systems

Curling clubs have been increasingly exploring alternatives to traditional Ammonia systems, and the benefits of making such a transition extend far beyond mere refrigeration concerns. Additional advantages of replacing Ammonia systems with Oxford's fullyintegrated chiller platform include increased safety, savings and control.

## **Safer Chemicals**

One of the primary advantages is the elimination of a hazardous chemical. Ammonia, known for its toxicity and flammability, is replaced with a non-toxic and non-flammable A1 refrigerant, ensuring a safer environment for club members and staff alike.

## **Cost Savings on Water Usage**

With the removal of evaporative condensers in Oxford Chiller platforms, curling clubs can bid farewell to water bills, water treatment expenses, and the need for additional chemicals. This results in significant cost savings over time.

#### **Enhanced Reliability**

Compressor redundancy ensures improved load balancing and energy efficiency, with a primary compressor equipped with a Variable Frequency Drive (VFD) for greater control.

#### **Streamlined Operations**

The new system has simplified start-up, shutdown, and mid-season maintenance procedures- minimizing disruptions and optimizing overall performance.

#### **Automated Set-back Features**

The system includes automatic set-back functionality, facilitating easy adjustments for different ice loads or activities, such as pebbling, thereby enhancing operational flexibility and efficiency.

## Improved Safety and Compliance

With the option to relocate the entire system outdoors, the hazards typically associated with mechanical rooms are eliminated, negating the need for regular inspections and ensuring compliance with safety regulations. There would be no requirement for life safety devices or alarms associated with Ammonia systems. The new system's receiver is small enough to be exempt from registration requirements.

#### **Reduced Maintenance**

The transition eliminates common maintenance tasks associated with Ammonia systems, such as draining oil or servicing compressor and chiller barrels, leading to increased operational efficiency and reduced downtime.

## **Advanced Monitoring and Control**

The interactive and intuitive control system allows for real-time monitoring of various parameters, including refrigeration operation, flow, brine flow, and temperature differentials, ensuring optimal performance at all times.

#### **Cost Transparency**

An energy meter offers detailed insights into operating costs, pull-down expenses, and the advantages associated with different control setups, such as set-back control during normal use or Bonspiels. This enables clubs to make informed decisions regarding energy usage and optimization strategies.

